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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,929	03/15/2004	Edward A. Enyedy	LEEE 2 00381	9567
27885	7590	05/17/2005	EXAMINER	
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			LANGDON, EVAN H	
			ART UNIT	PAPER NUMBER

3654

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,929

Applicant(s)

ENYEDY, EDWARD A.

Examiner

Evan H Langdon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilliland (US 5,540,371) in view of the Applicant's disclosure page 1 line 15 to page 3 line 29 and Figure 5.

Gilliland discloses a wire feeding mechanism for advancing a continuous length of wire 11 along a pathway, comprising:

a drive roller 32A, 32B for rotation therewith, the drive roller including an outer surface 32 extending circumferentially about the corresponding axis that defines a groove 35 having an included angle (Fig. 3B, col.6, lines 48-59), the drive roller compressively contacting a continuous length of wire such that the wire is advanced along the pathway in response to rotation of the drive rollers 32A, 32B.

The applicants disclosed prior art teaches a housing having two roller supports each rotatable about a corresponding axis transverse to a wire pathway, the roller supports being on opposite sides of a pathway and being driveably engaged with each other (page 1 lines 15+), and a drive roller (Fig. 5) including an outer surface extending circumferentially about the

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corresponding axis that defines a groove 126, 128 having an included angle of 30-60 degrees (Figure 5 and page 3, lines 13-22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the feeding mechanism of Gilliland to include a housing and roller supports as suggested by the applicant's disclosure page 1 lines 15+, to provide support and to modify the included angle of the circumferential groove of Gilliland to include an included angle of at least 30 degrees and less than 90 degrees (30-60 degrees) as suggested by the disclosed prior art of Figure 5 (page 3, lines 13-22), to decrease the compressive forces of the wire, and to provide more contact with the wire to reduce slippage while reducing the amount of pressure to grip the wire.

In regards to claim 4, Gilliland discloses where the centerline of the wire 11 is above the outer surface of the drive roller 32A, 32B, (Fig. 3B, col.6, lines 48-59).

In regards to claims 6 and 14, Gilliland discloses a wire feeding mechanism for advancing a continuous length of wire 11 along a pathway, comprising:

a housing 14 having two roller supports each rotatable about an axis transverse to a wire pathway, the roller supports being on corresponding opposite sides of the pathway and being driveably engaged with each other;

a first drive roller 32A concentrically disposed with one of the two roller supports for rotation therewith, the first drive roller including a first drive roller groove 35 extending circumferentially therearound and having a first drive roller included angle (Fig. 3B, col.6, lines 48-59, Gilliland) the angle of 30-60 degrees (Figure 5 and page 3, lines 13-22);

a second drive roller 32B concentrically disposed with the other of the two roller supports for rotation therewith, the second drive roller including a second drive roller groove 35 extending circumferentially therearound and having a second drive roller included angle of less than ninety degrees; and

the first and second drive rollers 32A, 32B positioned relative to one another such that a continuous length of wire received in the circumferential grooves between the first and second drive rollers is advanced along the passageway in response to rotation of said first and second drive rollers.

In regards to claim 8 and 18, Gilliland discloses where the centerline of the wire 11 is above the outer surface of the drive roller 32A, 32B, (Fig. 3B, col.6, lines 48-59).

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilliland in view the Applicant's disclosure page 1 line 15 to page 3 line 29 and Figure 5, as applied to claims 1-10 and 14-20 above and in further view of Blank et al. (US 6,427,894).

Blank teaches a wire feeding mechanism having a first 26, 37 and second 27, 38 set of drive rollers, each having a second drive roller groove (Fig. 3) extending circumferentially therearound and spaced from a first drive roller groove, and where one of the first and second drive rollers is radially adjustable.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wire feeder of Gilliland as modified by the Applicant's disclosure page 1 line 15 to page 3 line 29 and Figure 5 to include a second set of drive rollers as suggested by Blank, to increase the driving force on the wire.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the rollers of Gilliland as modified by the Applicant's disclosure page 1 line 15 to page 3 line 29 and Figure 5 to include a second groove as suggested by Blank, to provide extended life to the roller after the first groove is worn.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the drive rollers of Gilliland as modified by the Applicant's disclosure page 1 line 15 to page 3 line 29 and Figure 5 to include a radially adjustment as suggested by Blank, to control the compressive force of the wire exerted by the roller.

Response to Arguments

Applicant's arguments filed 18 April 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a pair of intersecting walls defining the groove) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, the Gilliland as modified by the Applicant's disclosure page 1 line 15 to page 3 line 29 and Figure 5 teaches this feature (Figure 5).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching,

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suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Gilliland clearly discloses a pair of drive rollers in Figure 3A wherein a first drive roller has a groove 34 and that second drive roller is relatively flat, and discloses a pair of drive rollers in Figure 3B each having a groove 34, 35. Gilliland goes on to say that the use of two grooves provides more contact with the wire than a single groove and minimizes the rollers slipping of the wire while using the least amount of pressure to grip the wire. Therefore, Gilliland discloses the advantages of using two grooves as opposed to one, while the Applicant's disclosure page 3 lines 13-29 and Figure 5 teaches using an angle of 30-60 degrees better grip the wire and further lessen the compressive forces required, and therefore, further lessen the amount of wire deformed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan H Langdon whose telephone number is (571)272-6948. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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